

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-010388**Date Inspected:** 02-Nov-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Chen Xi**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Crossbeams**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG CROSS BEAM CB1

This crossbeam appears to be complete and has been loaded on the ship.

OBG CROSS BEAM CB2

This crossbeam appears to be complete and has been loaded on the ship.

OBG CROSS BEAM CB3

This crossbeam appears to be complete and has been loaded on the ship.

OBG CROSS BEAM CB4

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

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OBG CROSS BEAM CB5

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB6

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB7

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB8

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB9

This QA observed ZPMC qualified welding personnel identified as 051246 and 053609 perform FCAW welding on weld joint identified as CB202A-009-011. ZPMC QC identified as Mr. Zhou Jie was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132.

This QA observed ZPMC qualified welding personnel identified as 053742 perform FCAW welding on weld joint identified as CB202G-022-166. ZPMC QC identified as Mr. Zhou Jie was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132.

OBG CROSS BEAM CB10

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB11

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB12

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This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB13

This QA observed that ZPMC appears to be nearly complete with the fit up of this crossbeam. This QA performed random visual inspection of the weld joint fit up on this crossbeam and discovered numerous noncompliant fillet weld joint root openings. The root openings range in size from 6mm to 9mm. The maximum allowed per the contract documents is 5mm. The weld joints and root openings are as follows:

CB202G-038-041/042_root opening = 7mm

CB202G-038-039/040_root opening = 9mm

CB202G-039-093/094_root opening = 6mm

CB202G-038-027/028_root opening = 6mm

CB202G-039-039/040_root opening = 7mm

CB202G-039-037/038_root opening = 7mm

CB202G-040-039/040_root opening = 6mm

CB202G-040-169/170_root opening = 8mm

CB202G-040-019/020_root opening = 8mm

CB202G-039-169/170_root opening = 9mm

CB202G-039-019/020_root opening = 9mm

CB202G-038-019/020_root opening = 6mm

CB202G-038-149/150_root opening = 9mm

CB202G-037-005/006_root opening = 6mm

NOTE: This QA did not perform visual inspection of the weld joint fit up on the entire crossbeam assembly due to the fact ZPMC has not completed the fit up of this crossbeam at this time.

OBG CROSS BEAM CB14

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB15

This QA observed that ZPMC has commenced fitting the floor beam sections to one of the side panels. No other significant work was observed on this crossbeam during the time QA was present.

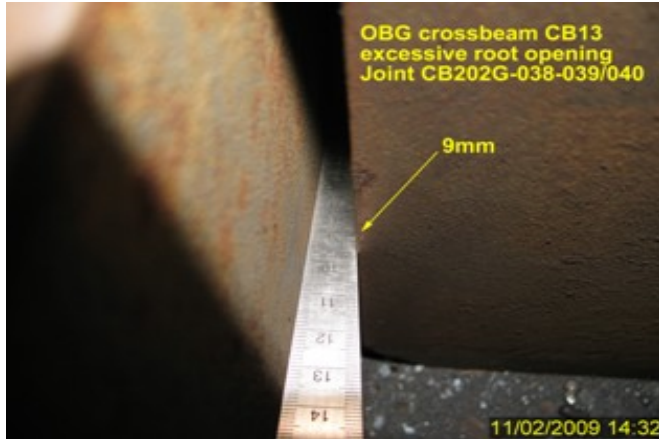
OBG CROSS BEAM CB16

This QA observed that ZPMC is continuing to fit this crossbeam together. Currently they have the side and intermediate panels fit and tack welded to the deck panel and are in the process of fitting the floor beam sections to the deck panel.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (15000422372), who represents the Office of Structural Materials for your project.

Inspected By:	Hall,Steven	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer
